(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 November 2002 (14.11.2002)

PCT

(10) International Publication Number
WO 02/090832 A1

(51) International Patent Classification[7]: F24D 19/10, F28F 27/00 // F24D 10/00

(21) International Application Number: PCT/SE01/00952

(22) International Filing Date: 3 May 2001 (03.05.2001)

(25) Filing Language: Swedish

(26) Publication Language: English

(71) Applicant and
(72) Inventor: LINDGREN, Matts [SE/SE]; Södra Saltsjönäsvägen 31, S-421 66 Västra Frölunda (SE).

(74) Agent: GÖTEBORGS PATENTBYRÅ DAHLS AB; Sjöporten 4, S-417 64 Göteborg (SE).

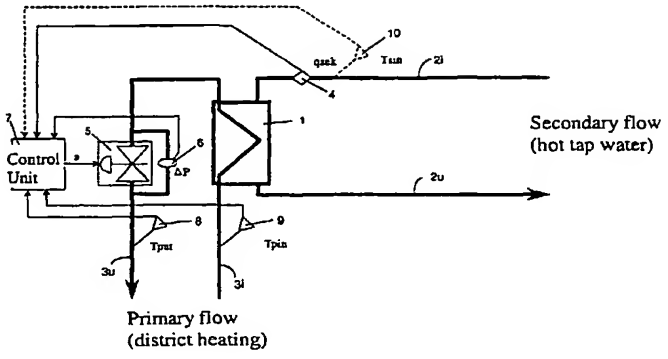
(81) Designated States *(national)*: AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK (utility model), SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND ARRANGEMENT FOR CONTROLLING THE TEMPERATURE OF THE OUTSTREAM FLOW FROM A HEAT EXCHANGER AND MEASURING PRODUCED HEAT



(57) Abstract: A procedure and device for controlling the temperature of at least one outbound secondary flow (2u) in a secondary circuit from a heat exchanger (1) by means of a primary flow (3) in a primary circuit, via a regulatory member (5, 11) that regulates the primary flow, influenced by a control unit (7). The enthalpy difference (Δh) between the inbound primary flow (3i) to the heat exchanger (1) and the outbound primary flow (3u) from the heat exchanger (1) is determined. The secondary flow (2i) is determined. The flow (3i) in the primary circuit (3) is determined, and the parameters determined above are supplied to the control unit (7) for controlling the regulatory organ (5, 11), whereby the primary flow (3) is controlled in dependence of the secondary flow (2), so that the power supplied to the heat exchanger through the primary flow (3) substantially equals the sum of, partly, the power needed to raise the temperature of the secondary medium from the current initial temperature T_{sec_in} to the desired outbound temperature $T_{sec\_out\_desired}$, and, partly, the assumed power requirement for compensating for the energy stored in the heat exchanger (1), and, partly, the assumed leak power from the heat exchanger (1). The invention also relates to a method for measuring power and heat quantity yielded by the primary medium.

WO 02/090832 A1